Claim Amendments

1-17. (canceled)

18. (new) A remedy for the reduction or suppression of the sensation of pain in higher animals, especially human beings, containing - with the exclusion of cells or cell lysates- expression constructs containing the POMC-sequence deleted of the coding regions for adrenocorticotropic hormone (ACTH) and beta-melanocyte stimulating hormone (β-MSH), which encode at least once for β-endorphin.

19. (new) The remedy according to claim 18, wherein one single expression construct encodes for one, two or three β-Endorphin.

20. (new) The remedy according to claim 18, which contains additionally an expression construct coding for corticotropin-releasing-factor (CRF).

21. (new) The remedy according to claim 19, which contains additionally an expression construct coding for corticotropin-releasing-factor (CRF).

22. (new) The remedy according to claim 18, where the βexpression construct is a plasmid or a linear, covalently closed expression construct.

23. (new) The remedy according to claim 22, which is applicable by injection.

24. (new) The remedy according to claim 22, where the DNA is complexed by polyethylenimine (PEI).

25. (new) The remedy according to claim 22, where the linear, covalently closed expression construct is modified with a peptide.

26. (new) The remedy according to claim 25, where the linear, covalently closed expression construct is modified with a peptide comprising the nuclear localization sequence (NLS) of the large T-antigen of SV40.

27. (new) The remedy according to claim 26, where the NLS peptide contains the amino acid sequence PKKKRKVEDPYC.

28. (new) The remedy according to claim 22, where the linear, covalently closed expression construct is conjugated to a cationic peptide of between 8 and 20 amino acids in length.

29. (new) A vector for the production of an expression construct as a component of a remedy, containing one of (A) and (B):

(A) the POMC-sequence deleted of the coding regions for adrenocorticotropic hormone (ACTH) and beta-melanocyte stimulating hormone (β-MSH), which encodes one of:

once for β-endorphin;

at least twice for β-endorphin;

three times for β-endorphin; and

(B) the desoxynucleic acid sequence of corticotropin releasing factor (CRF) (pMOK-CRF: Seq. ID 6).

30. (new) The desoxyribonucleic acid sequence, containing one of (C), (D), and (E):

(C) one of the sequence tracts encoding β-endorphin from the pro-opiomelanocotrin gene (POMC), specifically the sequence shown in Seq. ID 1 (rPOMC 1xβ-END);

(D) two of the sequence tracts encoding β-endorphin from the pro-opiomelanocotrin gene (POMC), specifically the sequence shown in Seq. ID 7 (rPOMC 2xβ-END); and

(E) three of the sequence tracts encoding β-endorphin from the pro-opiomelanocotrin gene (POMC), specifically the sequence shown in Seq. ID 2 (rPOMC 3xβ-END).